Biography day assignment

Will Schell

Write a 350 - 500-word paper on Alan Turing which includes, a biographical sketch, information on his contributions, and a picture with a quote.



"Sometimes it's the people no one imagines anything of who do the things that no one can imagine."

- Alan Turing

Alan Turing was born in 1912, in London, England, and killed himself by cyanide poisoning in 1954, in Wilmslow, Cheshire, due to being depressed when given estrogen because he was accused of being a homosexual. He had a lot of hobbies including running, gardening, and chess. During World War II, Turing was a British code breaker. As well as code breaking, Turing also worked in mathematics, logic, philosophy, mathematical biology, cryptanalysis, and what are now known as, computer science, cognitive science, and artificial intelligence. The Turing machine was one of his most famous accomplishments and led to the concept of the digital computer.

The Turing machine was not like other machines. It was more of an idealized mathematical model that limited the logical structure of calculations to what it truly needed. Turing envisioned that the machine would perform its jobs in an ordered sequence of steps. Instead of proving, within a formal system, that a mathematical statement could be true or false, Turing's machine was able to prove that there cannot exist an algorithm for determining if a proposition is undecidable. The machine is not one where you would type in algorithms and such. It was actually a tape fed machine, where the tape could be infinitely long. The tape was divided into squares which would contain a symbol or it would be blank. The tape head could move to, read, write, and erase a single square. It could also change to an internal state. The output of the mathematical query on the machine can be read from the system only when the machine has been stopped. This invention became the basis for all digital computers based off of the basic input and output, memory, and central processing unit. The input and output from a present-day computer would refer to the tape and reader of the Turing machine, the memory would be the control mechanism's storage, and the central processing unit would be the control mechanism on the machine.

- "World War II's Greatest Hero: The True Story of Alan Turing (Paid Post by The Weinstein Company From NYTimes.com)." *The New York Times*. The New York Times, 04 Feb. 2015. Web. 21 Feb. 2017.
- Copeland, B.J. "Alan Turing." *Encyclopædia Britannica*. Encyclopædia Britannica, Inc., 23 Feb. 2016. Web. 21 Feb. 2017.